

Portfolio

***Wisconsin Agriculture—Plant Science
Skill Certification Program***

Coop Areas Completed	Student Information
1. Employability Skills 2. Agribusiness 3. Plant and Soil Science	<div>Student</div> <div>Phone</div>
	<div>School</div> <div>Phone</div>
	<div>Teacher Coordinator</div> <div>Phone</div>
	<div>Workplace Mentor</div> <div>Phone</div>
<div> <div>Start Date</div> <div>End Date</div> </div>	<div>Other Information:</div> <div> </div>

Agriculture—Plant Science Skill Standards Rating Scale

- 3 Proficient—able to perform entry-level skills independently.
 2 Intermediate—has performed task; may need additional training or supervision.
 1 Introductory—is familiar with process but is unable, or has not had the opportunity, to perform task; additional training is required.
SB School Based
WB Work Based

Description of Skills	Rating			Initials		Comments
	3	2	1	SB	WB	

PART ONE: Core Employability Competencies

20 competencies must be achieved at level 2 or 3

Basic Skills

1. Reading—locates, understands, and interprets written information in prose and in documents such as manuals, graphs, and schedules.						
2. Writing—communicates thoughts, ideas, information and messages in writing; and creates documents such as letters, directions, manuals, reports, graphs and flow charts.						
3. Mathematics—Performs basic computations and approaches practical problems by choosing appropriately from a variety of mathematical techniques.						
4. Listening—receives, attends to, interprets, and responds to verbal messages and other cues.						
5. Speaking—organizes ideas and communicates orally.						
6. Career Development—understands application process, develops personal career goals, understands individual potential.						

Personal/Interpersonal Skills: Displays responsibility, self-esteem, sociability, self-management, integrity and honesty, and extends these skills to facilitating working well with others.

7. Demonstrates integrity/honesty and chooses ethical courses of action.						
8. Serves clients/customers, working to satisfy customer's expectations.						
9. Participates as a member of a team, contributing to group efforts.						
10. Demonstrates leadership skills, including teaching others new skills.						
11. Works well with women and men from diverse backgrounds.						

Thinking/Information Processing Skills: Thinks creatively, makes decisions, solves problems, visualizes, knows how to learn and reason, and acquire and utilize information to aid these processes where necessary.

12. Organizes, maintains, interprets, communicates information, using computers to aid this task where necessary.						
13. Recognizes problems and devises and implements plans of action.						
14. Generates new ideas through creative thinking.						
15. Makes decisions through specifying goals and constraints, generating alternatives, considering risks, and evaluating and choosing the best alternatives.						
16. Uses efficient learning techniques to acquire and apply new knowledge and skills.						

Description of Skills	Rating			Initials		Comments
	3	2	1	SB	WB	
Systems/Technology: Understands complex interrelationships of systems and works with a variety of technologies.						
17. Knows how social, organizational, and technological systems work and operates effectively with them.						
18. Understands relationships among technological functions, pinpoints errors in technologies' performance and corrects problems in operations.						
19. Selects the appropriate tools or equipment for a task, including computers and related technologies.						
20. Understands the function and proper procedures for technologies related to a task.						
21. Prevents, identifies, or solves problems with equipment, including computers and other technologies.						
22. Understands basic safety precautions and takes measures to implement them.						

PART TWO: Agribusiness Competencies

27 competencies must be achieved at level 2 or 3

Sales

1. Support the mission statement of the workplace.						
2. Identify potential customers.						
3. Determine customer needs and wants.						
4. Recommend product or service to meet customer needs and wants.						
5. Identify and overcome customer objections.						
6. Present sales proposal.						
7. Utilize sales tools.						
8. Close sale.						
9. Record sales information.						

Customer Relations

10. Respond to customer complaints.						
11. Establish a positive customer relationship.						

Marketing

12. Outline a marketing plan.						
13. Prepare product demonstrations, exhibits, or displays.						
14. Write news articles.						
15. Create advertisements.						

Technical Assistance

16. Acquire company/product information for use in providing customer service.						
17. Read and follow product label information.						
18. Explain safety precautions regarding product use or application.						
19. Utilize marketing/sales databases.						

<i>Description of Skills</i>	Rating			Initials		<i>Comments</i>
	<i>3</i>	<i>2</i>	<i>1</i>	<i>SB</i>	<i>WB</i>	

Process Customer Orders

20. Load, mix, and/or prepare orders for delivery.						
21. Complete invoices.						
22. Deliver products and load customer vehicles.						
23. Maintain customer information.						

Communications

24. Handle phone communications.						
25. Use fax, E-Mail, and other communication systems.						

Professional Development

26. Become involved as a student member of an agricultural/professional organization.						
27. Attend a sales or other job-related meeting.						
28. Differentiate among forms of agribusiness organizational structures.						
29. Explain the importance of agribusiness to international markets or the economy.						
30. Use agribusiness information and other continuing professional education sources to update plant/soil skills and knowledge.						

PART THREE: Plant and Soil Competencies

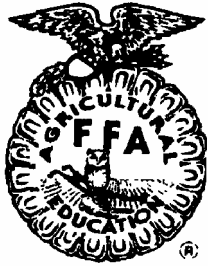
25 competencies must be achieved at level 2 or 3

Plant Morphology and Physiology Competencies

1. Predict the phenotypes of offspring from a genetic cross.						
2. Pollinate plants.						
3. Propagate plants asexually.						
4. Germinate seeds.						
5. Analyze plant emergence.						
6. Explain nutrient uptake in a plant.						
7. Manage factors that affect plant growth.						
8. Identify plant nutrient deficiencies.						
9. Demonstrate correct application of plant fertilizer.						
10. Demonstrate correct use of pesticides.						
11. Examine the factors that affect photosynthesis.						
12. Examine the factors that affect respiration.						
13. Examine the factors that affect transpiration.						
14. Identify 30 common weeds.						
15. Identify 10 agronomic crops.						
16. Identify 10 common crop seeds.						
17. Identify 5 common weed seeds.						

Description of Skills	Rating			Initials		Comments
	3	2	1	SB	WB	
Soil and Soil Management						
18. Explain the soil formation and development processes.						
19. Analyze the physical properties of soils.						
20. Assess the role of organic matter and microbes in the soil.						
21. Assess soil water conditions.						
22. Develop a tillage plan.						
23. Evaluate types of wind and water erosion.						
24. Determine erosion control methods.						
25. Determine the conservation and land use practices that are appropriate for a given land capability class.						
26. Interpret soil maps.						
27. Develop soil conservation plans for specific fields.						
28. Assess compliance with existing conservation compliance plans.						

The Competencies in This Portfolio Have Been Endorsed By:



Wisconsin FFA
Association



Wisconsin Association
for Leadership in
Education and Work



Wisconsin Association
of Vocational Agriculture
Instructors, Inc.



Wisconsin Association
for Career and Technical
Education



Wisconsin
Agribusiness
Council



Wisconsin
Technical College
System



Wisconsin Department of
Public Instruction